

WHAT IS CLAIMED IS:

1. to 27. (canceled)

28. (currently amended) Method for gathering flat printed products, especially signatures (2), by selecting a single printed product from each of a multitude of collections of identical printed products and conveying the selected printed products towards a collecting conveyor (10), where the selected printed products are piled up, which collecting conveyor moves runs along a generally straight line in a first direction (11), whereby the method comprises the following steps:

advancing the printed products in a second direction (15) crosswise to said first direction in a continuous flow of printed products with a feeder (1) with feeding elements upstream of the collecting conveyor (10),

gripping a leading portion (20) of a printed product at the discharge end of said feeder (1) by separating grippers (60) of a transferring conveyor (40) which is ~~also~~ arranged ~~upstream of~~ adjacent to and travels parallel to the collecting conveyor (10),

~~transferring moving~~ the gripped printed product with the transferring conveyor (40) away from the feeder substantially along a path, ~~which takes its course~~ extending generally along the said first direction (11) of the collecting conveyor (10).

29. (currently amended) Method according to claim 28 ~~characterized in, that a feeder (1) comprises~~ wherein the feeding element is a hopper (50) ~~as a feeding element.~~

30. (currently amended) Method according to claim 28 ~~characterized in, that the~~ wherein a transfer path of the transferring conveyor (40) is ~~crosswisely arranged towards said second direction (15) and~~ arranged in a principal plane of the printed product to be gripped at the discharge end of said feeder (1).

31. (previously presented) Method according to claim 28 characterized in, that the printed products delivered by the feeder (1) are advanced forward in a shingled formation.

32. (previously presented) Method according to claim 31 characterized in, that the shingled printed products are arranged on the feeder (1) backwardly superimposed.

33. (previously presented) Method according to claim 28 characterized in, that the printed products in the feeder (1) and/or the piles (4) in the collecting conveyor (10) are supplied in a substantially horizontal or substantially vertical plane.

34. (previously presented) Method according to claim 28, characterized in, that the printed products delivered by the feeder (1) are piled in a hopper (50) and the printed product to be taken by the transferring conveyor (40) is one of the lowermost piled samples of the printed products.

35. (previously presented) Method according to claim 28, characterized in, that the printed products are signatures (2) and the leading portion (20) of the signature (2) to be gripped by the transferring conveyor (40) is the backbone of the signature (2).

36. (previously presented) Method according to claim 28 characterized in, that a sucking force is applied by at least one vacuum element (33) upon at least the leading portion (20) of a foremost, uppermost or lowermost printed product so that such portion (20) is bent away thereby from the neighbouring upstream printed product.

37. (previously presented) Method according to claim 36 characterized in, that the sucking force acts upon an edge (21) of the leading portion (20) of the printed product upstream of the transferring conveyor (40), and that the leading portion (20) of the printed product is bent away by a separating device, which is moved along a straight line in the first direction from the edge (21) towards the opposite edge of the printed product, and which supports neighbouring upstream printed products during this movement, so that the gripping of the leading portion (20) of the printed product is eased.

38. (currently amended) Apparatus for gathering flat printed products, especially signatures (2), comprising:

a plurality of feeders (1) arranged in a sequence each for a collection of identical printed products with a selecting device for selecting single flat printed products; ~~and~~ a collecting conveyor (10), where the selected printed products are piled up, which ~~runs~~ collecting conveyor (10) moves along a generally straight line in a first direction (11), ~~characterized in, that:~~

wherein the feeders (1) advance the printed products by feeding elements in a second direction (15) crosswise to said first direction in a continuous flow of printed products[.,.];

a transferring conveyor (40) ~~comprises~~ comprising at least one separating gripper (60), which is ~~capable of~~ adapted to grip ~~gripping~~ a leading portion (20) of a printed product at ~~the~~ a discharge end of ~~a feeder~~ the feeders (1), ~~respectively, wherein~~ and the transferring conveyor (40) is arranged adjacent to and travels parallel to the collecting conveyor;

wherein the transferring conveyor (40) moves ~~transfers~~ the printed flat products away from the feeder substantially along a path, ~~which takes its course~~ extending generally along ~~the~~ said first direction (11) of the collecting conveyor (10).

39. (previously presented) Apparatus according to claim 38 characterized in, that the feeding elements comprise a hopper (50) where the second direction (15) is the movement of the printed products in a pile through the hopper (50).

40. (previously presented) Apparatus according to claim 38 characterized in, that the feeders (1) are designed to advance the printed products in a shingled formation.

41. (previously presented) Apparatus according to claim 38 characterized in, that the printed products in the feeder (1) and/or the piles (4) in the collecting conveyor (10) are supplied in a substantially flat lying way.

42. (currently amended) Apparatus according to claim 38, ~~characterized in, that the~~ wherein a transfer path of the transferring conveyor (40) is ~~crosswisely arranged towards said second direction (15) and~~ arranged in a principal plane of the foremost printed product at the discharge end of its feeder (1).

43. (previously presented) Apparatus according to claim 38 characterized in, that the separating gripper (60) comprises a separating wedge portion (63) with a separating edge (64), which is facing towards the travelling direction of movement of the separating gripper (60).

44. (currently amended) Apparatus according to claim 38 ~~characterized in, that there is~~ comprising at least one vacuum element (33) for applying a sucking force to at least the leading portion (20) of a foremost, uppermost or lowermost printed product and which is arranged in a position that it bends away such portion (20) of the printed product thereby from the neighbouring upstream printed product.

45. (currently amended) Apparatus according to claim 44 ~~characterized in, that wherein~~ the at least one vacuum element (33) is arranged at a position that it acts upon an edge (21) of the leading portion (20) of the printed product upstream of the transferring conveyor (40).

46. (previously presented) Apparatus according to claim 38 characterized in, that the printed products are fed into an inclined hopper (50), so that the printed products are resting aligned with their backbones along a back-gauge (90).

47. (previously presented) Apparatus according to claim 38 characterized in, that a plurality of separating grippers (60) are assembled in regular distances to a driving element, which is movable along the discharge ends of the feeders (1) at the same speed and in the same direction as the collecting conveyor (10), and that the separating grippers (60) travel on a guiding rail (13).

48. (previously presented) Apparatus according to claim 38, characterized in, that the distance between the separating grippers (60) is smaller than the distance between the discharge ends of the feeders (1).

49. (previously presented) Apparatus according to claim 38, characterized in, that the separating gripper (60) comprises a fixed top jaw member (62) with a separating wedge portion (63) with a separating edge (64) and a pivotable lower jaw member (65).

50. (currently amended) Apparatus according to claim 49 ~~characterized in, that wherein~~ the fixed top jaw member (62) and/or the pivotable lower jaw member (65) is made from a flexible material to be able to build up a clamping force.

51. (currently amended) Apparatus according to claim 49 ~~characterized in, that wherein~~ the pivotable lower jaw member is driven by a roller (67) on a lever acting upon a connecting rod, and that the roller (67) travels along a cam (14).

52. (currently amended) Apparatus according to claim 49 ~~characterized in, that wherein~~ the fixed top jaw member (62) and/or the pivotable lower jaw member (65) comprise a plurality of clamping spots which are spaced apart from each other.

53. (previously presented) Apparatus according to claim 38 characterized in, that the separating gripper (60) comprises a supporting surface (71) by which the printed product may be supported after being gripped.

54. (previously presented) Apparatus according to claim 38 characterized in, that each discharge end of a feeder (1) is associated with a buffer shelf (80), on which the gripped printed products can be dropped by the separating grippers (60) and from where they can be forwarded by the collecting conveyor (10).